Group: _____

9.2 Simple and Compound Interest Problems

Show your work for each question on a separate page then complete the table. Round answers to the nearest penny. Give decimal values for r and a number for n. In working the problems, express t in your formulas as a fraction and do not reduce. Use 365 for daily compounding.

	Investment	r	n	# of years	Future Value	Interest Earned
1	$2500	.0325	12	6		
2	$8000					
3	$6080		simple			
4	$1200					
5	$4100					
6	$10,750					
7	$9300					
8	$2000		simple			
9	$7125					
10	$5025					

1. Kaci invests $2500 at an annual rate of 3.25% compounded monthly for 6 years. What is the future value of the investment, and how much interest has she earned overall?

2. Carolyn invests $8000 at an annual rate of 7% compounded daily for 6 months.

3. Rob invests $6080 at an annual rate of 8.5% simple interest for 26 months.

4. John invests $1200 at an annual rate of 4.4% compounded semi-annually for 3 years.

5. Steve invests $4100 at an annual rate of 6.75% compounded quarterly for 1500 days.

6. Chelsea invests $10,750 at an annual rate of 5.5% compounded weekly for 4 years.

7. Cori invests $9300 at an annual rate of 2.75% compounded annually for 5 ½ years.

8. Doug invests $2000 at an annual rate of 3.5% simple interest for 2 years.

9. Julie invests $7125 at an annual rate of 7.4% compounded monthly for 36 months.

10. Donald invests $5025 at an annual rate of 6.25% compounded annually for 10 years.

Additional Questions

1. How much interest is earned in the last year of Kaci's investment? (5 points)

2. How much interest is earned in the seventh year of Donald's investment? (5 points)